

**WHAT IS CLAIMED IS:**

1. A method of extracting an audio signal from a noisy environment, comprising the step of:

utilizing a non-Gaussian model to extract the audio signal from the noisy environment.

2. The method in accordance with claim 1, further including the step of dynamically updating said non-Gaussian model during processing of the audio signal.

3. The method in accordance with claim 2, further including the step of updating the power spectral density of the audio signal during processing of the audio signal.

4. The method in accordance with claim 2, further including the step of updating the probability that the audio signal is present in the noisy environment.

5. The method in accordance with claim 3, further including the stop of updating the probability that the audio signal is present in the noisy environment.

6. The method in accordance with claim 1, wherein the audio signal is speech.

7. The method in accordance with claim 1, wherein the audio signal is music.

8. The method in accordance with claim 1, when said non-Gaussian model is provided with a plurality of components.

9. The method in accordance with claim 8, wherein said non-Gaussian model is provided with five components.

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10. A system for extracting an audio signal from a noisy environment, comprising:

a filter utilizing a non-Gaussian model to extract the audio signal from the noisy environment.

11. The system in accordance with claim 10, wherein said filter dynamically updates said non-Gaussian model during processing of the audio signal.

12. The system in accordance with claim 10, wherein said filter dynamically updates the power spectral density of the audio signal during processing of the audio signal.

13. The system in accordance with claim 10, wherein said filter dynamically updates the probability that the audio signal is present in the noisy environment.

14. The system in accordance with claim 12, wherein said filter dynamically updates the probability that the audio signal is present in the noisy environment.

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